

Key Risk Area (KRA)

KRA 3.5 Hot Work

1. Purpose

This document provides direction to ensure, so far as is reasonably practicable, that hot work is carried out safely and that hazards affecting workers, students, and visitors are identified, and risk elimination or control measures are implemented.

This document also provides guidance to eliminate or minimise, so far as is reasonably practicable, the risk of fire, explosion and property damage as well as resultant injuries caused by hot work.

2. Scope

This Guideline applies to all health, safety and wellbeing activities of staff, students, visitors (including volunteers and contractors), Council members, and other persons interacting with the University of Newcastle (workers); the operations of staff of University aligned Research Centres and controlled entities; and all activities conducted by or on behalf of the University of Newcastle on and outside of the University's campuses.

3. Guidelines

3.1. Risk Identification and Assessment

IFS will ensure that a risk assessment is conducted by a competent person and recorded in writing for all work involving hot work, so that risk elimination or control measures can be determined, so far as is reasonably practicable, and in accordance with Guideline [HSG 3.1 Health and Safety Risk Management](#).

Prior to any hot work commencing IFS or the nominated representative will ensure that the hazards associated with the work will be identified, assessed and elimination or control measures determined which will include operating under a Hot Work Permit. The requirement for a Hot Work Permit will be included in the contractor's Safe Work Method Statement (SWMS) or Job Safety Analysis (JSA).

Hot work performed in proximity to the following high risk situations will always require a Hot Work Permit:

- Flammable hazardous substances and dangerous goods storage;
- Oxygen and other industrial gas cylinders;
- Combustible stored items e.g. boxes, archives;
- Electrical switch rooms and electrical cables;
- Vegetation;
- Working at height above personnel, plant and equipment.

3.2. Specific Risk Controls

All hot work will be conducted under a Hot Work Permit issued by IFS or the nominated representative. The Permit will be signed by the contractor and all the workers involved in the job to confirm that they understand the risk elimination and control measures that will be applied. Refer to the [IFS Permit to Work Procedure](#) for further details.

IFS or the nominated representative will ensure that contractors conducting hot work have Safe Work Method Statements (SWMSs), Job Safety Analysis (JSAs) or Standard Operating Procedures (SOPs) specific for the work which have appropriate risk elimination or control measures, and which have been signed off by all workers who will be conducting the work. Refer to Guideline [HSG 6.1 Contractor Health and Safety Management](#) for details on further requirements.

Where it is not reasonably practicable to eliminate the need for hot work, the need or risk must be minimised so far as is reasonably practicable. Suitable and adequate information, training and instruction in relation to the work will be provided to relevant workers when required by the Work Health and Safety Regulation 2017 (NSW), records of which will be kept for two years. Refer to Guideline [HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency](#) for competency requirements.

Where it is not then reasonably practicable to eliminate the health and safety risks associated with hot work, so far as reasonably practicable, and risk controls directed at minimising associated risks so far as is reasonably practicable will be selected with reference to the hierarchy of control measures. Possible control measures must include:

- The hot work area is inspected to check that it is properly prepared to minimise the risk of fire, explosion or exposure to toxic gases;
- Flammable and/or combustible materials are removed from the hot work area and relocated at least 20 metres away;

- All drains, floor openings and pipe gutters within the vicinity of the hot work area are plugged, to prevent the possibility of sparks, slag or hot metal off cuts falling onto combustible materials;
- All energy sources are isolated;
- Welding screens are provided as required to contain sparks and prevent welding flashes to other persons in the area;
- Emergency response requirements are determined and portable fire protection equipment provided e.g. fire extinguishers, fire blankets and fire hoses;
- A person is nominated to act as a fire watch;
- Appropriate personal protective equipment is provided;
- When the relevant persons have inspected the area and are satisfied that all the work preparation tasks have been completed, a Hot Work Permit will be issued to the contractor and signed off by all the workers involved on the job.

3.3. Fire Watch

A Fire Watch Person may be required to be in attendance for the duration of the work if it is not possible for the person performing the hot work to thoroughly observe the immediate surrounding work area while the work is being conducted. The following actions apply to the role:

- Sufficient Fire Watch Person(s) will be provided by the contractor to ensure adequate monitoring of potentially affected areas and to allow isolation of equipment in the event of a fire;
- The name(s) of the Fire Watch Person(s) will be recorded on the Hot Work Permit;
- Where the work may generate hot sparks, the Fire Watch Person(s) will be equipped with suitable fire extinguishing equipment, including fire hoses in the immediate area if possible.

3.4. Completion of the Work

On completion of the hot work, the following actions will be taken:

- The contractor will inspect the area and check for 30 minutes after completion of the hot work for any smouldering debris;
- The contractor will document the completion time in the Hot Work Permit, and return it to IFS or the nominated representative;
- IFS or the nominated representative will inspect the work area after the job has been completed to check the area has been left free from smouldering debris prior to signing off the Hot Work Permit and filing it;

- Hot Work Permit records will be maintained for seven years in accordance with document control procedures Guideline [HSG 7.1 Health and Safety Records and Document Control](#).

4. Definitions

In the context of the Health and Safety Management System Framework:

Competent Person	A person who has, through training, qualification or experience, acquired the knowledge and skills to carry out a specified task.
Hot Work	Any activity that will produce a flame or other ignition source such as significant heat or sparks including oxygen/fuel gas welding or cutting, brazing, soldering, electric arc welding, spot welding, mig and tig welding, mechanical chipping and/or grinding.
Employer	Means the University of Newcastle (the University).
Executive Committee	Consisting of the Vice-Chancellor, the Deputy Vice-Chancellors, the Pro Vice-Chancellors, the Chief Operating Officer, Chief People and Culture Officer and the Chief Financial Officer, the University Secretary and the President of Academic Senate.
Leader / Supervisor	Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.
Worker	Includes an employee, conjoint, student on work experience, contractor, sub-contractor, and volunteer. A person is a worker if the person carries out work in any capacity for the University or another person conducting a business or undertaking, including work as: (a) an employee, or (b) a contractor or subcontractor, or (c) an employee of a contractor or subcontractor, or (d) an employee of a labour hire company who has been assigned to work in the person's business or undertaking, or (e) an outworker, or (f) an apprentice or trainee, or (g) a student gaining work experience, or (h) a volunteer, or (i) a person of a prescribed class.

5. Responsibilities

A comprehensive list of health, safety and wellbeing responsibilities is provided in [HSG 1.2 Roles and Responsibilities Guideline](#).

Specific responsibilities under this Guideline include:

Infrastructure and Facility Services (IFS)

- Ensure hot work is performed in accordance with this procedure and the requirements of the Work Health and Safety Regulation 2017 (NSW);
- Ensure that contractors who are required to undertake hot work have the appropriate procedures, equipment and competent persons to undertake the work;
- Ensure that any hot work is conducted under a Permit to Work issued by IFS or a nominated representative;
- Ensure that the area where hot work is conducted is returned safely to service on completion of the work and the Permit to Work is signed off;
- Provide information in relation to affected locations where hot work is to be conducted to ensure the necessary actions are taken to protect workers, students and other persons, so far as is reasonably practicable.

Leaders and Supervisors

- Ensure that risk elimination and control measures are followed when they are implemented to protect workers, students and any other persons when hot work is to be conducted, so far as is reasonably practicable.

Health, Safety and Wellbeing Team

- Provide professional input regarding hot work when required; and
- Support IFS in risk assessment and review of hot work.

6. References & Related Documents

The following documentation is referenced in, or applicable to this Guideline:

[HSG 1.2 Roles and Responsibilities](#)

[HSG 3.1 Health and Safety Risk Management](#)

[HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency](#)

[HSG 6.1 Contractor Health and Safety Management](#)

[IFS Permit to Work Procedure](#)

[SafeWork NSW Welding Process Code of Practice](#)

7. Amendment History

Version	Date of Issue	Approval	Section(s) Modified	Details of Amendment
1	September 2015	Director, People and	-	Original version

		Workforce Strategy		
2	October 2023	CPCO	All	1. All sections reviewed for legal compliance 2. Updated content in all sections 3. Added new/renamed Related Documents 4. Added Amendment History 5. Amended document control header and footer

8. Appendices

Nil